July 25, 2003

Mr. Joseph Hirsch
MARC Woodworking
1719 English Avenue
Indianapolis, Indiana 46201

Re: Registered Construction and Operation Status,
097-15261-00196

Dear Mr. Hirsch:

The application from MARC Woodworking, received on November 20, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following custom casework manufacturer, to be located at 1719 English Avenue, Indianapolis, Indiana 46201, is classified as registered:

(a) Two (2) Binks paint booths, installed in 1976, identified as emissions unit 001 and 002, painting custom casework, with a maximum gas flow rates of 1,600 and 8,400 cubic feet per minute, respectively, and exhausting to stacks 1 and 2, respectively.

(b) One (1) JBI South paint booth, installed in 1976, identified as emissions unit 003, painting custom casework, with a maximum gas flow rate of 5,000 cubic feet per minute, and exhausting to stack 3.

(c) Woodworking operations, with a maximum process weight rate of 103.9 pounds wood per hour, installed in 1976, including nine (9) saws, two (2) shapers, a groover, a mortiser, a machining center, two (2) sanders, a splicer, a planer, a joiner, a jointer, an edgebander, and a single head molder, identified collectively as 004, with varying capacities, controlled by sawdust collectors, and vented internally.

The following conditions shall be applicable:

Pursuant to 40 CFR Part 63 Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations), the owner or operator of this area source shall maintain records of the total gallons of coating, gluing, cleaning, and washoff materials used each month, and upon request submit such records to the Administrator. These records shall be maintained for five year.

Pursuant to 326 IAC 2-6 (Emission Reporting), the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

Pursuant to 26 IAC 5-1(Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6)

minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Pursuant to 326 IAC 6-3-2(d) (Particulate emission limitations, work practices, and control technologies), the allowable particulate matter emissions rate from the paint booths, 001, 002, and 003, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

(a) The source shall operate the control device in accordance with the manufacturer's specifications.

(b) If the overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Pursuant to 326 IAC 6-3-2(e), the particulate emissions from the woodworking operations shall be limited to five hundred sixty-five thousandths (0.565) pound per hour.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015
and
Office of Environmental Services
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to OAQ and OES if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez, Administrator

aco

cc: File, Marion County
Air Compliance, Matt Mosier
IDEM, Mindy Hahn
Permits, Angelique Oliger

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	**MARC Woodworking**
Address:	**1719 English Avenue**
City:	**Indianapolis, Indiana 46201**
Authorized individual:	**Joseph Hirsch**
Phone #:	**(317) 635-9663**
Registration #:	**097-15261-00196**

I hereby certify that MARC Woodworking is still in operation and is in compliance with the requirements of Registration 097-15261-00196.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: MARC Woodworking
Source Location: 1719 English Avenue, Indianapolis, Indiana 46260
County: Marion
SIC Code: 2521, 2431
Operation Permit No.: 097-15261-00196
Permit Reviewer: Angelique Oliger

The Office of Environmental Services (OES) has reviewed an application from MARC Woodworking relating to the manufacturing of custom casework.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Two (2) Binks paint booths, installed in 1976, identified as emissions unit 001 and 002, painting custom casework, with a maximum gas flow rates of 1,600 and 8,400 cubic feet per minute, respectively, and exhausting to stacks 1 and 2, respectively.

(b) One (1) JBI South paint booth, installed in 1976, identified as emissions unit 003, painting custom casework, with a maximum gas flow rate of 5,000 cubic feet per minute, and exhausting to stack 3.

(c) Woodworking operations, with a maximum process weight rate of 103.9 pounds wood per hour, installed in 1976, including nine (9) saws, two (2) shapers, a groover, a mortiser, a machining center, two (2) sanders, a splicer, a planer, a joiner, a jointer, an edgebander, and a single head molder, identified collectively as 004, with varying capacities, controlled by sawdust collectors, and vented internally.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
1	001	16.8	2.5	16,000	Ambient
2	002	17.3	2.8	8,400	Ambient
3	003	17	2.5	5,000	Ambient

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Administrator that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on November 20, 2001.

Emission Calculations

See Appendix A (three pages) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	21.46
PM-10	21.46
SO_2	negligible
VOC	14.81
CO	negligible
NO_x	negligible

HAP's	Potential To Emit (tons/year)
ethyl benzene	0.12
xylene	1.33
toluene	4.29
ethyl formaldehyde	0.03
methanol	3.82
MEK	1.33
MIBK	1.33
TOTAL	8.28

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM is equal to or greater than five (5) tons per year and less than twenty-five (25) tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is also equal to or greater than five (5) tons per year and less than twenty-five (25) tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than twenty-five (25) tons per year. Therefore, the source is registered and subject to the provisions of 326 IAC 2-5.1-

2.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the emission data included in the application.

Pollutant	Actual Emissions (tons/year)
PM	0.02
PM-10	0.02
SO_2	negligible
VOC	8.41
CO	negligible
NO_x	negligible
ethyl benzene	0.06
xylene	0.84
toluene	1.26
ethyl formaldehyde	0.03
methanol	0.93
MEK	0.37
MIBK	0.32

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO_2	maintenance attainment
NO_2	attainment
Ozone	maintenance attainment
CO	attainment
Lead	unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Marion County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and

volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	21.46
PM10	21.46
SO_2	negligible
VOC	14.81
CO	negligible
NO_x	negligible
Single HAP	4.29
Combination HAPs	8.28

(a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source. 40 CFR Part 63 Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations) does not apply to this source because this is not a major source of HAPs. The source is an area source for the purpose of this subpart. Because this source uses no more than 250 gallons per month, for every month, of coating, gluing, cleaning, and washoff materials at the source, including materials used for source categories other than wood furniture (surface coating), the owner or operator shall maintain records of the total gallons of coating, gluing, cleaning, and washoff materials used each month, and upon request submit such records to the Administrator. These records shall be maintained for five year.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source was constructed prior to the applicability date of this rule, 326 IAC 2-4.1. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and is located in Marion County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1(Opacity Limitations)

The Opacity regulation 326 IAC 5-1 is generally applicable to all point sources of emissions. Since the source is located in Marion County, and is not located in the areas of Marion County referred to in 326 IAC 5-1-5, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1 (Non Attainment Area Limitations)

Since the source does not have the potential to emit greater than 100 tons per year of particulate matter, or actual emissions of greater than 10 tons per year of particulate matter, and it is not one of the sources listed in 326 IAC 6-1-12, 326 IAC 6-1 does not apply.

326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies)

(a) The paint booths, identified as 001, 002, and 003, are subject to 326 IAC 6-3-2(d) (Particulate emission limitations, work practices, and control technologies), because they are spray coating operations that use more than five (5) gallons per day. Pursuant to this rule, the allowable particulate matter emissions rate from the paint booths, 001, 002, and 003, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

(1) The source shall operate the control device in accordance with the manufacturer's specifications.

(2) If the overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or

accumulates on the ground. These records must be maintained for five (5) years.

The source complies with 326 IAC 6-3-2(d) through the use of a dry particulate filters on the paint booths.

(b) Pursuant to 326 IAC 6-3-2(e), the particulate emissions from the woodworking operations shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The process weight for the woodworking operations is 103.9 pounds per hour. Therefore, the allowable rate of emission for the woodworking operations is five hundred sixty-five thousandths (0.565) pound per hour. The source complies with 326 IAC 6-3-2(e) through the use of a sawdust collector.

326 IAC 8-2 (Surface Coating Emission Limitations)

The three (3) paint booths are not subject to 326 IAC 8-2 (Surface Coating Emission Limitations), because they existed as of January 1, 1980, and they have the potential to emit less than one hundred (100) tons per year of VOC.

Conclusion

This manufacturer of custom casework shall be subject to the conditions of the attached proposed Registration 097-15261-00196.

HAP Emission Calculations

Company MARC Woodworking, Inc.
Plant Loca 1719 English Avenue, Indianapolis, Indiana 46201
County: Marion
Permit Re Angelique Oliger
Date: 25-Jul-03

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % ethyl benzene	Weight % xylene	Weight % toluene	Weight % formaldehyde	Weight % methanol	Weight % MEK	Weight % MIBK	ethyl benzene (ton/yr)	xylene (ton/yr)	toluene (ton/yr)	ethyl formaldehyde (ton/yr)	methanol (ton/yr)	MEK (ton/yr)	MIBK (ton/yr)	total HAPs (ton/yr)
Topcoat	7.8	0.16000	1.0	2.00%	11.00%	2.00%	0.15%	0.00%	0.00%	0.00%	0.11	0.60	0.11	0.01	0.00	0.00	0.00	0.83
Catalyst	9.0	0.01400	1.0	0.00%	0.00%	0.00%	0.00%	19.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.10
Sealer	7.6	0.37000	1.0	1.00%	6.00%	2.00%	0.24%	0.00%	0.00%	0.00%	0.12	0.74	0.25	0.03	0.00	0.00	0.00	1.14
Vinyl sealer	8.1	0.32800	1.0	0.00%	6.00%	4.00%	0.23%	0.00%	2.00%	0.00%	0.00	0.69	0.46	0.03	0.00	0.23	0.00	1.41
atalyst Lacqu	7.6	0.28900	1.0	0.00%	2.00%	2.00%	0.15%	0.00%	0.00%	0.00%	0.00	0.19	0.19	0.01	0.00	0.00	0.00	0.40
Methanol	6.6	0.13200	1.0	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	3.82	0.00	0.00	3.82
-1271 Thinne	7.1	0.47600	1.0	0.00%	9.00%	29.00%	0.00%	0.00%	9.00%	9.00%	0.00	1.33	4.29	0.00	0.00	1.33	1.33	8.28
/M&P Naphth	6.3	0.02640	1.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total State Potential Emissions

worst case:	**0.12**	**1.33**	**4.29**	**0.03**	**3.82**	**1.33**	**1.33**	**8.28**

ETHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: MARC Woodworking
Address City IN Zip: 1719 English Avenue, Indianapolis, Indiana 46260
CP: 097-15261-00196
Reviewer: Angelique Oliger
Date: July 25, 20

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pound per hour	Potential VOC pound per day	Potential VOC tons per year	Particulate Potential ton/yr	Transfer Efficiency
Topcoat	7.8	65.01%	0.0%	65.0%	0.0%	0.00%	0.16000	1.000	5.08	5.08	0.81	19.50	3.56	0.96	50%
Catalyst	9.0	42.43%	0.0%	42.4%	0.0%	0.00%	0.01400	1.000	3.81	3.81	0.05	1.28	0.23	0.16	50%
Sealer	7.6	68.12%	0.0%	68.1%	0.0%	0.00%	0.37000	1.000	5.18	5.18	1.92	46.03	8.40	1.97	50%
Vinyl sealer	8.1	68.32%	0.0%	68.3%	0.0%	0.00%	0.32800	1.000	5.50	5.50	1.80	43.29	7.90	1.83	50%
talyst Lacq	7.6	70.92%	0.0%	70.9%	0.0%	0.00%	0.28900	1.000	5.39	5.39	1.56	37.38	6.82	1.40	50%
Methanol	6.6	100.00%	0.0%	100.0%	0.0%	0.00%	0.04380	1.000	6.61	6.61	0.29	6.95	1.27	0.00	
1271 Thinr	7.1	100.00%	0.0%	100.0%	0.0%	0.00%	0.15774	1.000	7.09	7.09	1.12	26.84	4.90	0.00	
M&P Napht	6.3	100.00%	0.0%	100.0%	0.0%	0.00%	0.00876	1.000	6.26	6.26	0.05	1.32	0.24	0.00	

otential Emissions **Add worst case coating to all solvents** **14.81** **6.31**

THODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used